ANSWER 17 OF 74 MEDLINE on STN
AN 97432052 MEDLINE
DN PubMed ID: 9286056
TI Immunogenicity of filamentous phage displaying peptide mimotopes after oral administration.
AU Delmastro P; Meola A; Monaci P; Cortese R; Galfre G
CS IRBM Piero Angeletti, Roma, Italy.
SO Vaccine, (1997 Aug) Vol. 15, No. 11, pp. 1276-85.
Journal code: 8406899. ISSN: 0264-410X.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199710
ED Entered STN: 24 Oct 1997
Last Updated on STN: 24 Oct 1997
Entered Medline: 16 Oct 1997
AB Selected human sera can be used to identify disease-related peptide epitopes (mimotopes) displayed on bacteriophages. Parenteral administration of such recombinant phages is an effective route of immunization in different experimental animals, indicating that mimotopes could be an important source of leads for new vaccines. Here it is shown that intranasal or intragastric administration of phage in mice induces an immunological response both to the wild type proteins of the phage and to mimotopes displayed on them. Using mimotopes of human HBV surface antigen and of human HCV peptides, the authors show that the response induced by oral administration is specifically cross-reactive with the original antigen. These findings indicate that phage displaying selected mimotopes could be useful for the development of orally effective vaccines.

ANSWER 7 OF 74 MEDLINE on STN
AN 1999211966 MEDLINE
DN PubMed ID: 10194518
TI Generating FSH antagonists and agonists through immunization against FSH receptor N-terminal decapeptides.
AU Abdennebi L; Couture L; Grebert D; Pajot E; Salesse R; Remy J J
CS Unite Recepteurs et Communications Cellulaires, INRA-Biotechnologies, 78352 Jouy-en-Josas, France.
SO Journal of molecular endocrinology, (1999 Apr) Vol. 22, No. 2, pp. 151-9.
Journal code: 8902617. ISSN: 0952-5041.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199906
ED Entered STN: 18 Jun 1999
Last Updated on STN: 18 Jun 1999
Entered Medline: 9 Jun 1999
AB Follicle-stimulating hormone (FSH) via interaction with G-protein coupled specific receptors plays a central role in the control of gametogenesis in mammals of both sexes. In females, FSH is crucial for follicle growth, follicle maturation and ovulation. FSH receptors, together with luteinizing hormone-chorionic gonadotropin and thyrotropin receptors belong to a subfamily of structurally related receptors within the seven transmembrane receptor family. Among several other regions, the N-terminus of these receptors is believed to be responsible for important specific hormone-receptor contact sites. Recombinant filamentous phages displaying at their surface three overlapping N-terminal decapeptides of the FSH receptor, peptides A18-27, B25-34 and C29-38 were constructed. Ewes and female mice were immunized against the three FSH receptor (FSHR) recombinant phages. Immunoglobulins purified from immunized animals were analyzed for their biochemical properties on a Chinese hamster ovary cell line expressing the porcine FSH receptor. AntiA and antiB immunoglobulins (IgGs) behave as antagonists for 125I-FSH binding and for FSH-dependent cAMP production, while antiC IgGs did not compete for hormone binding. By contrast, antibodies against the C29-38 peptide displayed FSH agonist activity and stimulated the FSH receptor, whereas antiA and antiB IgGs did not. Furthermore, when the FSHR phages were used as peptidic vaccines, they induced a reversible inhibition of ovulation rate in ewes, and impaired fertility in female mice.

ANSWER 5 OF 74 MEDLINE on STN
AN 1999386875 MEDLINE
DN PubMed ID: 10456929
TI Phage-displayed T-cell epitope grafted into immunoglobulin heavy-chain complementarity-determining regions: an effective vaccine design tested in murine cysticercosis.
AU Manoutcharian K; Terrazas L I; Gevorkian G; Acero G; Petrossian P; Rodriguez M; Govezensky T
CS Instituto de Investigaciones Biomedicas, Universidad Nacional Autonoma de Mexico, AP 70228, Mexico D.F., C.P. 04510, Mexico.. karman@servidor.unam.mx
SO Infection and immunity, (1999 Sep) Vol. 67, No. 9, pp. 4764-70. Journal code: 0246127. ISSN: 0019-9567.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199910
ED Entered STN: 14 Oct 1999
Last Updated on STN: 14 Oct 1999
Entered Medline: 5 Oct 1999
AB A new type of immunogenic molecule was engineered by replacing all three complementarity-determining-region (CDR) loops of the human immunoglobulin (Ig) heavy-chain variable (V(H)) domain with the Taenia crassiceps epitope PT1 (PPPVDYLYQT) and by displaying this construct on the surfaces of M13 bacteriophage. When BALB/c mice were immunized with such phage particles (PIgphage), a strong protection against challenge infection in very susceptible female hosts was obtained. When specifically stimulated, the in vivo-primed CD4(+) and CD8(+) T cells isolated from mice immunized with PT1, both as a free peptide and as the PIgphage construct, proliferated in vitro, indicating efficient epitope presentation by both major histocompatibility complex class II and class I molecules in the specifically antigen-pulsed macrophages used as antigen-presenting cells. These data demonstrate the immunogenic potential of recombinant phage particles displaying CDR epitope-grafted Ig V(H) domains and establish an alternative approach to the design of an effective subunit vaccine for prevention of cysticercosis. The key advantage of this type of immunogen is that no adjuvant is required for its application. The proposed strategy for immunogen construction is potentially suitable for use in any host-pathogen interaction.

L12 ANSWER 6 OF 74 MEDLINE on STN
AN 1999263197 MEDLINE
DN PubMed ID: 10329580
TI Production and characterization of human monoclonal antibody Fab fragments to vaccinia virus from a phage-display combinatorial library.
AU Schmaljohn C; Cui Y; Kerby S; Pennock D; Spik K
CS Virology Division, United States Army Medical Research Institute of Infectious Diseases, Frederick, Maryland, 21702-5011, USA.. Cschmalj@detrick.army.mil
SO Virology, (1999 May 25) Vol. 258, No. 1, pp. 189-200. Journal code: 0110674. ISSN: 0042-6822.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-AJ241344; GENBANK-AJ241345; GENBANK-AJ241346; GENBANK-AJ241347; GENBANK-AJ241348; GENBANK-AJ241349; GENBANK-AJ241350; GENBANK-AJ241351; GENBANK-AJ241352; GENBANK-AJ241353; GENBANK-AJ241354; GENBANK-AJ241355; GENBANK-AJ241356; GENBANK-AJ241357; GENBANK-AJ241358; GENBANK-AJ241359; GENBANK-AJ241360; GENBANK-AJ241361; GENBANK-AJ241362; GENBANK-AJ241363; GENBANK-AJ241364; GENBANK-AJ241365; GENBANK-AJ241366; GENBANK-AJ241367; GENBANK-AJ241368; GENBANK-AJ241369; GENBANK-AJ241370; GENBANK-AJ241371;

GENBANK-AJ241372; GENBANK-AJ241373; +
EM 199906
ED Entered STN: 12 Jul 1999
Last Updated on STN: 12 Jul 1999
Entered Medline: 23 Jun 1999
AB A combinatorial, phage-display library of human Fab antibody fragments was generated from IgG heavy chain (HC) and light chain (LC) genes cloned from the lymphocytes of a vaccinia virus (VACV)-immune donor. To ascertain the complexity of the library, nucleotide sequences of the variable regions of the HC and LC genes were determined. Fourteen distinct HC and 18 distinct LC (7 kappa and 11 lambda) that formed a combinatorial library of 22 Fabs were identified. Immune-precipitation of radiolabeled VACV revealed that at least six different VACV proteins were recognized by the antibodies. Plaque-reduction neutralization demonstrated that six of the Fabs neutralized VACV in the presence of anti-human antibody. ELISA studies indicated that 15 of the Fabs were cross-reactive with monkeypox virus.

ANSWER 1 OF 74 MEDLINE on STN

AN 2000395463 MEDLINE

DN PubMed ID: 10909766

TI Phage-display of antigenic peptides applied to vaccine design.

AU Fanutti C; Del Pozzo G; De Berardinis P; Guardiola J; Deng L W; Perham R N

CS Department of Biochemistry, University of Cambridge, UK.

SO Biochemical Society transactions, (1998 Feb) Vol. 26, No. 1, pp. S8.
Journal code: 7506897. ISSN: 0300-5127.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200008

ED Entered STN: 24 Aug 2000
Last Updated on STN: 24 Aug 2000
Entered Medline: 15 Aug 2000

ANSWER 17 OF 19 MEDLINE on STN
AN 2001022669 MEDLINE
DN PubMed ID: 11027345
TI Immunization against Alzheimer's beta -amyloid plaques via EFRH phage administration.
AU Frenkel D; Katz O; Solomon B
CS Department of Molecular Microbiology and Biotechnology, The George S. Wise Faculty of Life Sciences, Tel-Aviv University, Ramat Aviv, Tel-Aviv 69978, Israel.
SO Proceedings of the National Academy of Sciences of the United States of America, (2000 Oct 10) Vol. 97, No. 21, pp. 11455-9.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200011
ED Entered STN: 22 Mar 2001
Last Updated on STN: 22 Mar 2001
Entered Medline: 9 Nov 2000
AB The epitope EFRH, corresponding to amino acids 3-6 within the human beta-amyloid peptide (AbetaP), acts as a regulatory site controlling both the formation and disaggregation process of the beta-amyloid fibrils (Abeta). Locking of this epitope by highly specific antibodies affects the dynamics of the entire AbetaP molecule, preventing self-aggregation as well as enabling resolubilization of already formed aggregates. Production of such antibodies by repeated injections of toxic human Abeta fibrils into transgenic mice suggests the feasibility of vaccination against Alzheimer's disease. Here, we report the development of an immunization procedure for the production of effective anti-aggregating beta-amyloid antibodies based on filamentous phages displaying the EFRH peptide as specific and nontoxic antigen. Effective autoimmune antibodies were obtained by EFRH phage administration in guinea pigs, which exhibit AbetaP identical to the human AbetaP region. Moreover, because of the high antigenicity of the phage, no adjuvant is required to obtain high affinity anti-aggregating IgG antibodies after a short immunization period of 3 weeks. Availability of such antibodies opens up possibilities for the development of an efficient and long-lasting vaccination for the prevention and treatment of Alzheimer's disease.

ANSWER 18 OF 19 MEDLINE on STN
AN 1998351614 MEDLINE
DN PubMed ID: 9688328
TI N-terminal EFRH sequence of Alzheimer's beta-amyloid peptide represents the epitope of its anti-aggregating antibodies.
AU Frenkel D; Balass M; Solomon B
CS Department of Molecular Microbiology and Biotechnology, The George S. Wise Faculty of Life Sciences, Tel-Aviv University, Ramat Aviv, Israel.
SO Journal of neuroimmunology, (1998 Aug 1) Vol. 88, No. 1-2, pp. 85-90. Journal code: 8109498. ISSN: 0165-5728.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199808
ED Entered STN: 3 Sep 1998
Last Updated on STN: 3 Sep 1998
Entered Medline: 24 Aug 1998
AB Monoclonal antibodies 6C6 and 10D5 raised against the N-terminal of beta-amyloid peptide interfere with the formation of beta-amyloid and trigger reversal to its non-toxic components. The epitopes of these antibodies were localized employing a library composed of filamentous phage displaying random combinatorial hexapeptides. Among 44 positive phage-clones, selected from the library by both antibodies, 40 clones carried the consensus sequence EFRH. These EFRH phage-clones bind specifically mAbs 6C6 or 10D5 with an apparent binding constant of approximately 10(-9) M. The peptide EFRH inhibits binding of mAbs 6C6 or 10D5 to beta-amyloid peptide in affinities identical to those obtained. with the peptides corresponding to positions 1-9, 1-16 and 1-40 of beta-peptide. These findings confirm that the peptide EFRH which is located at positions 3-6 within beta-amyloid peptide represents the sequential epitope of mAbs 6C6 and 10D5.

ANSWER 9 OF 10 MEDLINE on STN

AN 95046942 MEDLINE

DN PubMed ID: 7958482

TI Bacteriophages as tools for vaccine development.

AU Hatfull G F; Barsom L; Chang L; Donnelly-Wu M; Lee M H; Levin M; Nesbit C; Sarkis G J

CS Department of Biological Sciences, University of Pittsburgh, PA.

SO Developments in biological standardization, (1994) Vol. 82, pp. 43-7.
Ref: 11
Journal code: 0427140. ISSN: 0301-5149.

CY Switzerland

DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)

LA English

FS Priority Journals

EM 199412

ED Entered STN: 10 Jan 1995
Last Updated on STN: 10 Jan 1995
Entered Medline: 21 Dec 1994

AB The construction of live recombinant bacterial vaccines requires a reasonably sophisticated genetic system for the introduction, stabilization and expression of foreign antigen genes. Bacteriophages offer a rich collection of tools that can be used for vaccine construction, including site-specific integration-proficient vectors, non-antibiotic selectable markers and signals for efficient transcription and translation of foreign genes. We describe the characterization of a temperate phage of the mycobacteria, mycobacteriophage L5, and application of these phage studies for the construction of recombinant BCG vaccines.

ANSWER 6 OF 10 MEDLINE on STN
AN 2001355193 MEDLINE
DN PubMed ID: 11282203
TI Induction of hepatitis B virus-specific cytotoxic T lymphocytes response in vivo by filamentous phage display vaccine.
AU Wan Y; Wu Y; Bian J; Wang X Z; Zhou W; Jia Z C; Tan Y; Zhou L
CS The Institute of Immunology, The Third Military Medicine University, 30 Gaotanyan Street, Shapingba District, Chongqing 400038, People's Republic of China.. a65428305@public.cta.cq.cn
SO Vaccine, (2001 Apr 6) Vol. 19, No. 20-22, pp. 2918-23.
Journal code: 8406899. ISSN: 0264-410X.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200106
ED Entered STN: 25 Jun 2001
Last Updated on STN: 25 Jun 2001
Entered Medline: 21 Jun 2001
AB The ability of inducing MHC class I restricted cytotoxic T lymphocytes response in vivo via recombinant filamentous phage was investigated. The recombinant filamentous phage particles that displayed the Hepatitis B virus epitope S(28--39) were injected into BALB/c (H-2d) mice without adjuvants. A MHC class I restricted HBs specific CTL response was found 8 days after injection. The potentiality of using the recombinant filamentous phage as anti-virus vaccine was discussed.